

AMENDMENTS TO THE CLAIMS

Claim 1. (Currently Amended) A system for producing a signal adapted to characterize tissue and to correct for optical fluctuations, consisting of:

a laser ~~means~~ module for generating an emission signal and a reference signal,

a splitter connected to said laser module for splitting said emission signal and said reference signal,

a probe with a needle that is adapted to be inserted into the tissue and that directs said emission signal to the probe and through the needle to the tissue for characterizing the tissue,

an emission optical detector,

a reference optical detector,

a transmission system including

an emission optical fiber connected to said ~~laser means~~ said splitter, to said probe, to said needle, and to said emission optical detector that transmits said emission signal to said probe, to said needle, and from said probe to the tissue for characterizing the tissue, and from the tissue to said needle, to said probe and to said emission optical detector, and

a reference optical fiber connected to said ~~laser means~~ said splitter, to said probe, and to said reference optical detector that transmits said reference signal to said probe and from said probe to said reference optical detector, and

a compensation system that utilizes said reference signal to correct said emission signal and producing a signal for characterizing the tissue for the optical fluctuations.

2. (Currently Amended) The system for producing a signal adapted to characterize tissue of claim 1, wherein said laser ~~means~~ module comprises

multiple ~~laser sources and means~~ lasers that generate ~~an~~ said optical emission signal and ~~an~~ said optical reference signal.

3. (Cancelled)
4. (Cancelled)
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8. (Cancelled).
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14. (Cancelled)
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16. (Cancelled)